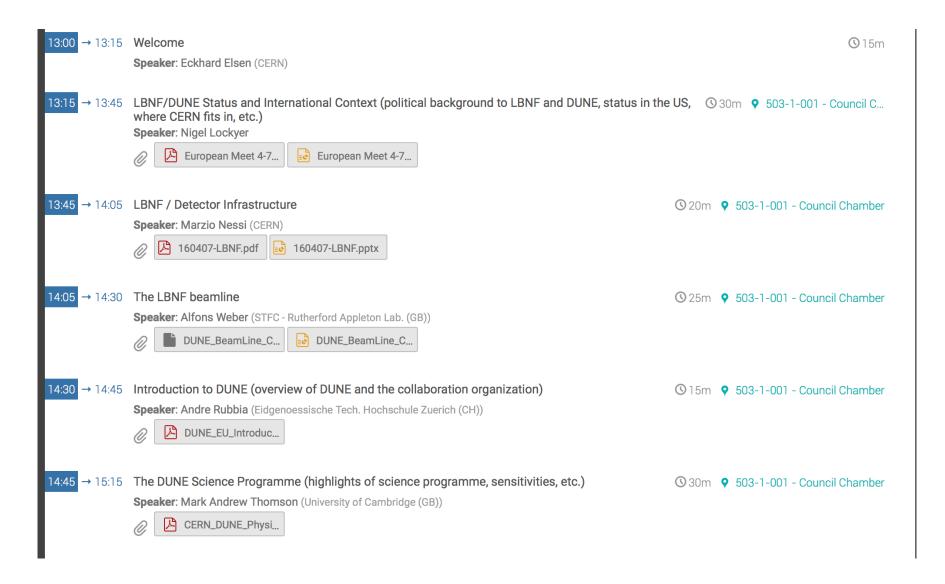
## **Recent Events**

## European Neutrino Meeting LBNF/DUNE

- 7-8 April 2016 at CERN
- "The meeting will focus on medium and long-term opportunities for European scientists and engineers to participate in LBNF/DUNE. ... The meeting will also discuss the formation of international partnerships to contribute to the different aspects of LBNF/DUNE."
- https://indico.cern.ch/event/493989/ timetable/
- 70 registrants





## Neutrino - Latin America Workshop

27-28 April 2016 *Fermilab* US/Central timezone

Search

#### **Overview**

Timetable

Registration

Registration Form

List of registrants

Getting to Fermilab

Internet Access

Visa Letter

Accommodations

Meeting Support

Organizing Committee

A number of current and future neutrino experiments already have a strong connection between Latin America and Fermilab, including MINERVA, NOVA, MINOS, CONNIE, LARIAT, SBND, and the Deep Underground Neutrino Experiment (DUNE). DUNE is being set up to be a truly international collaboration, with Fermilab as the host laboratory and with strong support from CERN. Two new liquid argon detectors, known collectively as protoDUNE, will be constructed over the next two years at the neutrino platform at CERN.

The success of future neutrino initiatives depends on strong engagement from the global scientific community. This meeting will focus on the opportunities for Latin American scientists. The meeting will also discuss the formation of international partnerships, building on the long-standing participation of Latin American Institutions in the global particle physics program at Fermilab, CERN and elsewhere.

**Dates:** from April 27, 2016 08:00 to April 28, 2016 19:00

Timezone: US/Central Location: Fermilab

Room: One West

## Neutrino Latin American Workshop

- Wednesday, April 27 to Thursday, April 28 at FNAL
- https://indico.fnal.gov/conferenceDisplay.py? confld=11392
- 65 registrants
- Thursday largely devoted to Dune Agenda

https://indico.fnal.gov/conferenceOtherViews.py?

view=standard&confld=11392

## Dune talks

- Introduction to LBNF/DUNE
- LBNF and opportunities in accelerator science
- The DUNE detectors and opportunities for collaboration
- ProtoDUNE at CERN possibilities for involvement
- Opportunities in software and computing
- DUNE neutrino oscillation physics
- Supernova neutrinos in DUNE
- Nucleon Decay in DUNE
- Opportunities for involvement in DUNE scientific programme
- How can theorists get involved in DUNE
- International partnerships for LBNF/DUNE

# Engineering meeting on ProtoDUNE Single phase

- 26 Apr to 29 Apr 2016
- https://indico.cern.ch/event/520686/
- Meeting focused on planning the ProtoDUNE installation
- Primarily technical



- 26 Apr 2016, 08:00 → 29 Apr 2016, 18:00 Europe/Zurich
- 9 3179 (CERN)
- Jack Fowler Jr (Duke University (US)) , Maria Chamizo Llatas (State University of New York (US)) , Marzio Nessi (CERN)

Videoconference Rooms





#### Wednesday, 27 April 2016



→ 12:00 Visit to EHN1, ICARUS, bdg 182



- 3:30 → 15:30 Cryogenic piping
  - Cryogenic piping will be installed before the TPC. This will be installed in parallel with the installation of the TPC support structure.
  - Upper manifolds will be installed and support from the cryostat and feed thrus.
  - Floor manifolds will be installed in two parts. The vertical members will be installed from outside down through their ports. The lower manifolds will be attached and welded from the floor.
  - Piping supports to the north wall.
  - Piping supports to the floor.



NP-04\_3d\_view\_int...

# Sessions/Discussions

- Cryogenic piping
- TPC support
- APA, PD integration, CE integration, integrated test enclosure
- Integrated test enclosure discussion
- CPA
- Field cage top and bottom
- Trial Assembly Ash River
- Field cage end walls

# Typical topics for discussion

- Packaging estimate.
- Handling equipment (including transport from SAS to working position).
- Method of assembly. Will we hang and assemble vertically or assemble horizontal and lift the column onto the rail?
- Electrical connections. Access required inside cryostat. Equipment required in the clean room to test connections.
- Any temporary structure or support necessary and the removal.
- Access needed and plans.
- Component weights and size
- Need for measurement of electrical connections after installation inside cryostat?

# Photon Detector Workshop



## Physics Performance and Requirements (09:00-10:00)

time [id] title	presenter
09:00 [0] Physics Impact of Photon System	Dr. HIMMEL, Alexander
09:20 [1] Supernova, Ar-39 and the Photon System	SINEV, Gleb
09:40 [2] Revisiting photon detector requirements	BOLTON, Tim

### Current Design (10:00-10:50)

	time [id] title	presenter
	10:00 [3] Single Phase (20+5)	Mr. WARNER, David
I	10:25 [5] Dual Phase (20+5)	Dr. LUX, Thorsten

## Electronics and Lessons Learned from 35 ton (11:20-12:30)

time [id] title	presenter
11:20 [6] Electronics, Calibration, and Noise	Dr. DJURCIC, Zelimir
11:50 [7] Commissioning and Data Rate (15+5)	Dr. HIMMEL, Alexander
12:10 [8] Discussion of Electronics Requirements (15+5)	Dr. TOUPS, Matt

https://indico.fnal.gov/conferenceDisplay.py?confld=12089